



Millhaugh: Fieldwalking MH14.1 and MH14.2

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1. Introduction

Collections from systematic fieldwalking may provide insight and give an overview into the distribution of activity areas (Gardiner 1987, 57), assist in the creation of geographic models utilising lithic scatters as representative of sites within the landscape (cf. Allen 1991; Barrowman 2000; Wagstaff 1991), and offer explanations for patterns in land-use (cf. Barrowman 2003, 100; Foley 1981). Bias is inherent in surface collections regardless of the expertise of the fieldwalker in the recognition of chipped stone artefacts; Gardiner (1987, 57) makes explicit the incomplete nature of surface collections often including artefacts from different archaeological periods, i.e. the conflation of four dimensions into two. Despite these limitations they remain a valuable and under-utilised resource to understand and give meaning to prehistoric lifeways, instigate new research agendas and highlight areas for future archaeological investigation (after Schofield 1995a, 5; 1995b, 108-109; cf. Wright 2012a).

SERF excavations under the direction of Dr Kenny Brophy are planned for June/July 2014 at Millhaugh barrow (Figure 1). Drs Kenny Brophy and Dene Wright visited Millhaugh on 27 March 2014. It was noted that the barrow field was under crop and was, therefore, unavailable to us to walk. Fields MH14.1 and MH14.2 had been recently ploughed and permission was sought and forthcoming from both the landowner and farmer to walk these fields. The fieldwalking, which was carried out by a small team of five supervised students over four days from 14 to 17 April 2014.



Figure 1: Location of Millhaugh barrow and fields 14.1 and 14.2.

2. Archaeological background

There is no record of any archaeological investigations into these fields, save for the transcription of a aerial photograph of MH14.1 (Figure 2). The cropmarks were formally scheduled in June 1996. They are recorded as a prehistoric settlement comprising of a number of circular enclosures and other cropmarks; interpreted as an enclosure/barrow, pit alignment and ring ditch. Another aerial photograph from Royal Commission on the Ancient and Historic Monuments of Scotland 'RCAHMS' is shown at Figure 3. A search using the online PastMap facility at RCAHMS confirms that all of MH14.1 has been scheduled.

There are no references to any known archaeology at MH14.2.



Figure 2: Combined aerial photograph and draft transcription of the scheduled monuments located within MH14.1.



Figure 3: Aerial photograph of WH14.1. © RCAHMS SC505287.

3. Geology

The drift geology for MH14.1 and MH14.2 is predominantly fluvio-glacial deposits of gravels and sand bordered by glacial till (Figure 4).

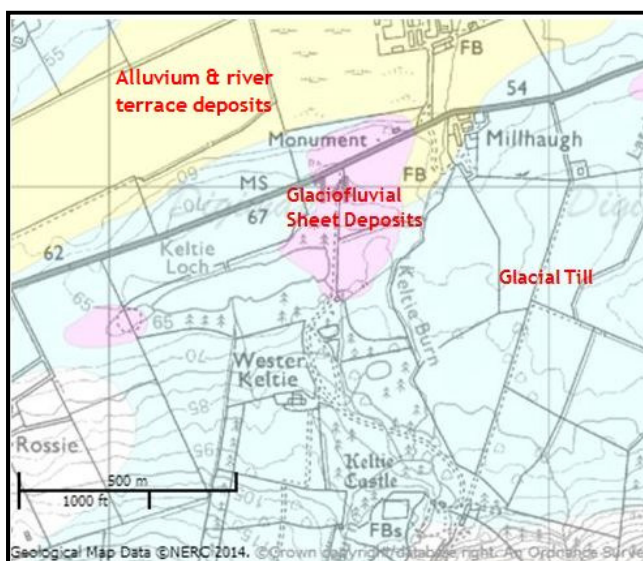


Figure 4: Drift geology at Millhaugh (Digimap® EDiNA Geology Roam online resource; © NERC/Crown copyright database right).



4. Aims and objectives

The principal aim of the fieldwalking was to recover by surface collection lithics, prehistoric pottery and artefacts to assist in the interpretation of the cropmarks at MH14.1 and establish if there was any evidence for prehistoric events at MH14.2.

5. Methodology

Following the fieldwalking at Leadketty/Baldinnies in 2013 it was decided not to set up grid squares (Wright 2013). Artefact recovery locations were recorded using a Garmin® GPSMap® 62S, with an accuracy resolution of c.2-3m.

The students had no previous experience of fieldwalking and as such were set at 1m, 6m and 11m and 16m, each covering 5m laterally for the transverse and so on. Experienced fieldwalkers would be expected to be set at 10m intervals. The writer followed behind the fieldwalkers to attempt to ensure that artefacts were not missed.

The fieldwalkers placed pin flags to highlight material to be examined. All artefacts were allocated a unique number with eastings and northings plotted using the GPS and bagged. All data was entered in the fieldwalking daybook.



Figure 5: Fieldwalking at Millhaugh.



6. Results

6.1 Methodology

The methodology employed has proved to be successful with a significant time-savings in not having to set up 20m² grid squares. The tolerance level of c.2-3m achieved by the GPS is more than adequate for the surface collection of material from scattered locations. A greater resolution will be required where high densities of artefactual material are located.

6.2 Non-lithic materials

Blue glass, metalwork and a sample of the sherds of pottery in the top soil were collected. These finds were inspected by Dr Ewan Campbell of the University of Glasgow who reported that:

- all of the glass was 19th century;
- the metalwork could be described as heavily corroded non-period specific ferrous objects; and
- the pottery sherds could be typologically dated to the 19th and early 20th centuries.

Specific mention can be made of two artefacts. Firstly, a badly worn Georgian penny dated to late 18th and early 19th centuries was collected from MH14.1. Secondly, a sherd of Late Medieval red ware (14th-16th centuries) came from MH14.2.

6.3 Lithics: preliminary notes

The lithic artefacts collected are representative of and evidence for prehistoric events at Millhaugh, save for a gunflint from MH14.1.

106 lithics were recovered from MH14.1 and 30 from MH14.2. Overall the most common raw material is flint (Figure 6), although agate and chalcedony artefacts have the greatest percentage frequency when MH14.2 is solely considered, which may indicate different phases of activity. The diversity of raw materials is a common feature in lowland prehistoric assemblages.

The cortex on seven of the flint artefacts suggests that the raw material was not beach pebble flint but collected from fluvio-glacial sources having eroded out of the glacial till/boulder clay.

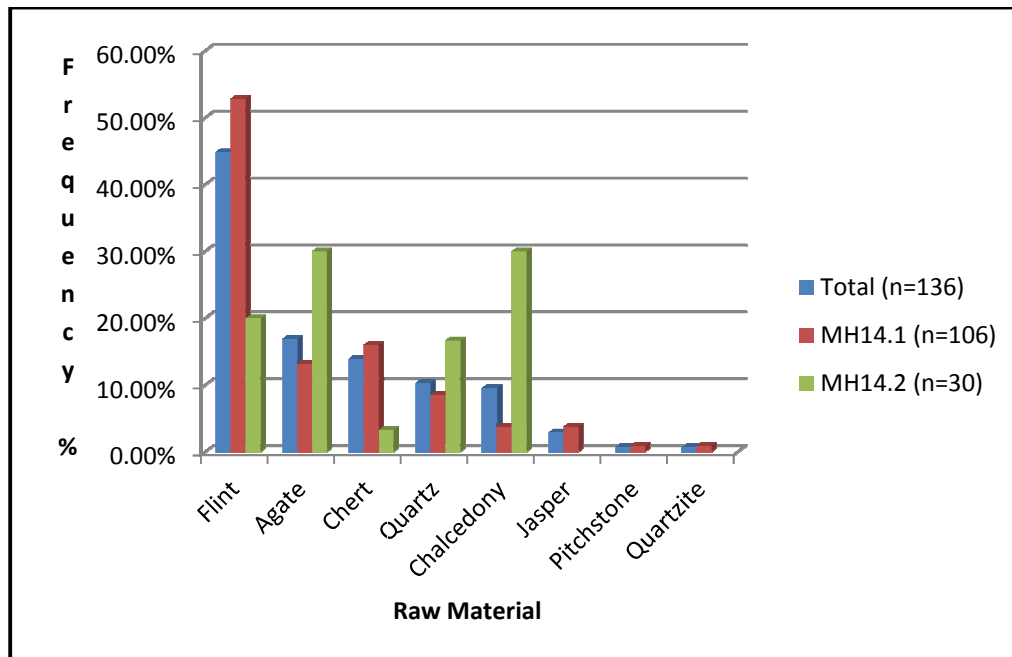


Figure 6: Percentage frequency of lithics by raw materials.

A brief typological analysis of the lithics has been carried out. The character of the assemblages from MH14.1 and MH14.2 can be found at Appendices I and II, respectively.

Flakes dominate the assemblage with relatively few blades recovered (Figure 7). Flakes are common in lithic assemblages and cannot without other corroborating evidence be unequivocally be ascribed to any particular period in prehistory. If there was to be evidence for Mesolithic events we would have expected to have recovered more blades and bladelets. The presence of an Arran pitchstone blade may suggest either a Neolithic or Early Bronze Age provenance (cf. Brophy *et al.* 2012; Wright 2012b). Pitchstone artefacts from mainland contexts generally relate to Post-Mesolithic activities (cf. Ballin 2009).

The flakes indicate the use of platform and bipolar reduction strategies. There is no attribute evidence to suggest that these strategies were coeval and bipolar reduction may indicate a separate phase of reduction at Millhaugh.

Generally quartz has a low percentage frequency in Mesolithic assemblages, although there are exceptions, e.g. Powbrone (cf. Wright 2012a; Wright in prep). An increase in the use of quartz has been attributed as an Early Neolithic development in Eastern Scotland (cf. Warren 2006a).

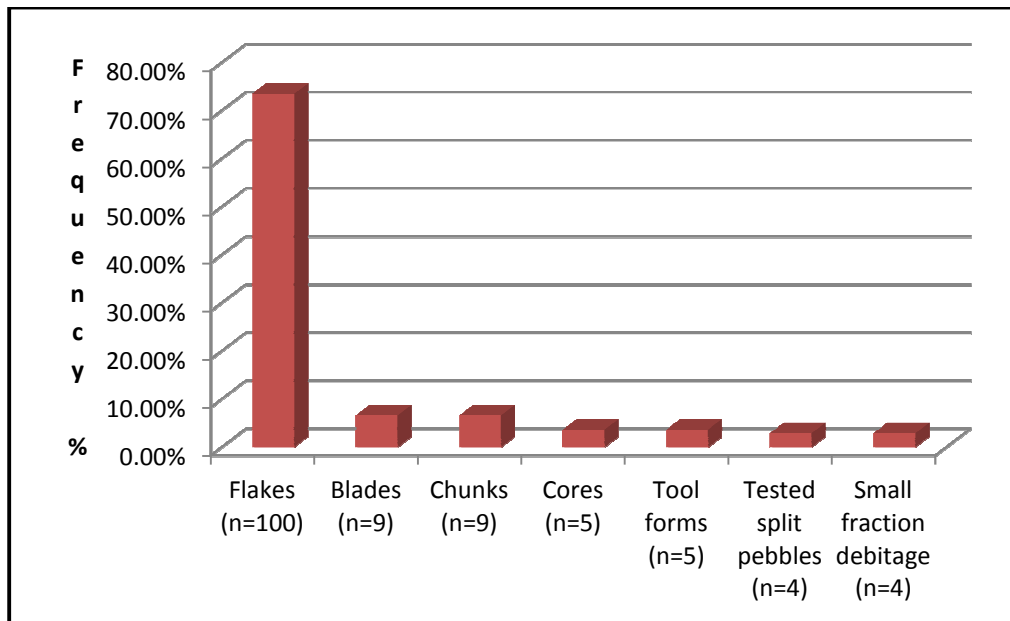


Figure 7: Typological analysis of assemblage from Millhaugh MH14.1 and MH14.2.



Figure 8: Flake and blades including pitchstone blade on right (preliminary record shots only).

Apart from the gunflint, the only other retouched pieces comprise three scrapers from MH14.1 and one notched flint flake from MH14.2. Scrapers are common artefacts in the assemblages of later prehistory (cf. Finlay *et al.* 2000a, 583). A denticulate and convex scraper and sub-angled scraper cannot be categorically ascribed to any particular period in prehistory. However, the sub-angled scraper with semi-invasive direct retouch could be referred to as a ‘thumbnail scraper’. These forms are typically Bronze Age (cf. Edmonds 1995, 159-160; Hardy and Wickham-Jones 2007).



Figure 9: Left: scrapers and notched flake on right. Right: gunflint (preliminary record shots only).

There are flakes which present with edge damage. These artefacts will be considered as part of a full technological analysis of the assemblage which will be undertaken in due course.

Artefact distribution

The recovery locations of lithics by raw material is highlighted in the distribution map at Figure 10. The majority of the lithics were located from an area which may be described as a broad linear band running south-west to north-east across the field. It is interesting to note that the lithics are away from the northern penannular ring ditch/enclosure and the southern enclosure/barrow (refer to Figure 2).

The artefact distribution may suggest that working activity areas are in the general vicinity of those features interpreted from the cropmark evidence as a pit alignment. It is also possible that a number of cropmark anomalies to the west of the pit alignment may represent previously unrecognised archaeological features.

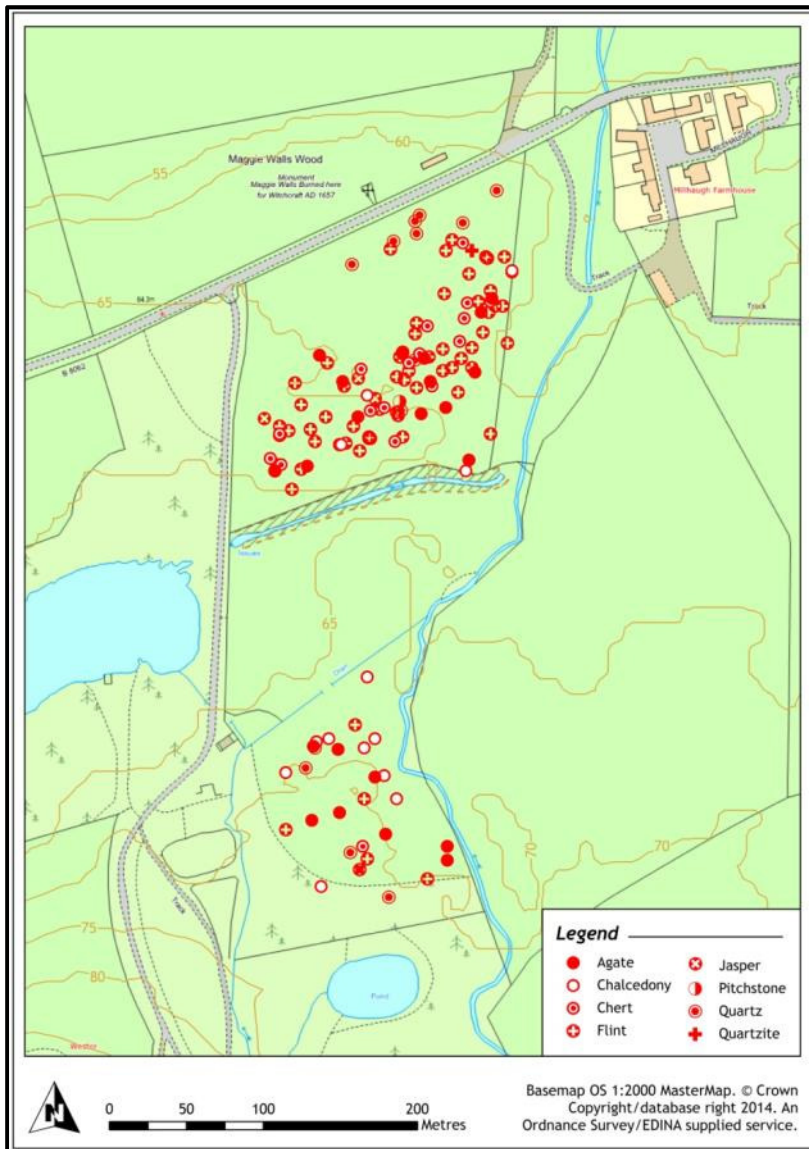


Figure 10: Recovery locations of lithics by raw material. Distribution map prepared by Terence Christian.

7. Millhaugh: proposed future fieldwork (subject to permissions)

7.1 Fieldwalking programme

Fieldwalking should continue at Millhaugh. MH14.1 should be re-walked in Spring 2015 to determine what two more ploughing rotations may cast up. The preferred priority of fields to be walked is shown at Figure 11 with the Millhaugh barrow field (1) heading the list. A draft transcription of the cropmarks in (2) is shown at Figure 11.



Figure 11: Fields for future fieldwalking at Millhaugh, subject to obtaining the necessary permissions.



Figure 12: Combined aerial photograph and draft transcription of the scheduled monuments located in field 2 at Millhaugh.

7.2 Other fieldwork at MH14.1

Consideration should be given to undertaking:



- Geophysical survey to attempt to identify archaeological features which do not show up as cropmarks;
- Excavation of a series of test pits focusing on the areas where lithics have been recovered by fieldwalking to attempt to establish the presence or otherwise of lithic scatters.

Excavations would potentially allow us to pursue a rigorous research agenda to determine answers to questions such as:

- What do the cropmarks represent?
- What is the chronology of these features? Can any relationship between these features be recorded?
- What is the character of the features interpreted as a pit alignment? Are all of the features pits or were any of the features defined by posts, and if so, what type of timber was used, what size of posts, and how were they erected?
- Is there any artefactual evidence for domestic events and/or tasks, and if so how does that evidence relate to the cropmarks?

8. Summary

Lithic assemblages associated with ritual sites from the Neolithic, and the same may be said of the Bronze Age (e.g. Watson and Bradley 2000), are generally small in comparison to those from the Mesolithic period (after Warren 2006a, 34). This has been explained by radical changes in depositional practice in the Neolithic (Healy 1987; Warren 2006a, 34-35). The work undertaken on the SERF project may be said to attest to these comments.

The success of the fieldwalking particularly at MH14.1 was particularly pleasing. It seems reasonable to suggest that additional artefactual evidence of prehistoric events will be recovered by pursuing a systematic programme of fieldwalking at Millhaugh.

The fieldwalking has also highlighted the need for further archaeological investigations at MH14.1 to answer additional research questions arising from the work undertaken. Coupled with the proposed excavations at Millhaugh barrow, this could herald the start of a programme of fieldwork to offer an understanding of the archaeology of Millhaugh and place it within its wider environs.

9. Acknowledgements

Many thanks to Calum Rollo (landowner) and John Neil (farmer) for their gracious permission to allow us to walk these fields, and to an excellent fieldwalking team, namely Alex Alexander, Sophie Bojadjieva, Gillian Bond, Daniel MacLean, Patricia Neuhoff and Katherine Price (Figure 13). Thanks must also go to Dr Ewan Campbell who kindly looked at and advised on the non-lithic materials, and Terence Christian for producing the distribution map.



Figure 13: The fieldwalking team at Millhaugh. Left to right: Daniel MacLean, Patricia Neuhoff, Sophie Bojadjieva, Gillian Bond, Katherine Price and Alex Alexander (inset).



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All SERF reports and more information about the project may be found at our web pages.

www.gla.ac.uk/schools/humanities/research/archaeologyresearch/projects/serf/

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Appendix I: Character of the lithic assemblage from MH14.1

	Total	Agate	Chert	Chalcedony	Flint	Jasper	Pitchstone	Quartz	Quartzite
Tested Split Pebbles	2		1					1	
Chunks	5	3	1			1			
Cores	4	1	2		1				
Flakes	83	9	13	4	46	3		7	1
<i>Primary</i>	7		1		1			4	1
<i>Secondary</i>	13	3	2		7	1			
<i>Tertiary</i>	63	6	10	4	38	2		3	
<i>Primary regular</i>									
<i>Primary irregular</i>	7		1		1			4	1
<i>Secondary regular</i>									
<i>Secondary irregular</i>	13	3	2		7	1			
<i>Tertiary regular</i>	4				4				
<i>Tertiary irregular</i>	59	6	10	4	34	2		3	
Blades	7	1			4		1	1	
<i>Primary</i>									
<i>Secondary</i>	3				2			1	
<i>Tertiary</i>	4	1			2		1		
<i>Primary regular</i>									
<i>Primary irregular</i>									
<i>Secondary regular</i>	1				1				
<i>Secondary irregular</i>	2				1			1	
<i>Tertiary regular</i>	2				2				
<i>Tertiary irregular</i>	2	1					1		
Small Fraction	1				1				
Modified	4				4				
Total	106	14	17	4	56	4	1	9	1



Appendix II: Character of the lithic assemblage from MH14.2

	Total	Agate	Chert	Chalcedony	Flint	Quartz
Tested Split Pebbles	2	2				
Chunks	4	2	1		1	
Cores	1	1				
Flakes	17	2		6	4	5
<i>Primary</i>						
<i>Secondary</i>	2					2
<i>Tertiary</i>	15	2		6	4	3
<i>Primary regular</i>						
<i>Primary irregular</i>						
<i>Secondary regular</i>						
<i>Secondary irregular</i>	2					2
<i>Tertiary regular</i>						
<i>Tertiary irregular</i>	15	2		6	4	3
Blades	2	1		1		
<i>Primary</i>						
<i>Secondary</i>						
<i>Tertiary</i>	1	1		1		
<i>Primary regular</i>						
<i>Primary irregular</i>						
<i>Secondary regular</i>						
<i>Secondary irregular</i>						
<i>Tertiary regular</i>	1			1		
<i>Tertiary irregular</i>	1	1				
Small Fraction	3	1		2		
Modified	1		1			
Total	30	9	2	9	5	5